

striking wheel thereof from being rubbed with any object to accidentally ignite. Besides, the underage kids are also unable to ignite the disposable lighter 10' without any adult supervision by preventing the striking wheel be struck by an minor's thumb.

What is claimed is:

1. A disposable lighter, comprising:

a lighter body for receiving a liquefied fuel therein;

a mounting frame, which is sealedly affixed on top of said lighter body, comprising a first and a second supporting wall integrally, parallelly, vertically, and upwardly extended from two sides of said mounting frame, said mounting frame further having a vertical spring chamber between said first and second supporting walls;

a flint spring being received in said spring chamber;

a gas lever being pivotally mounted between said first and second supporting walls and having a central cutout to allow said spring penetrating therethrough to insert into said spring chamber, said gas lever further integrally providing a thumb pusher at one end thereof;

a gas valve with a gas nozzle extending upwards above said mounting frame being installed inside said mounting frame, said gas nozzle being engaged with another end of said gas lever, so that when said thumb pusher is pushed downwardly, said another end of said gas lever lifts said gas nozzle to release gas from an interior of said lighter body via said gas valve;

an ignition device comprising a flint and a striking wheel, wherein said flint is supported on top of said flint spring with a bottom portion thereof inserting into said spring chamber, said striking wheel which has a circumferential coarse striking surface being positioned right above said flint by rotatably mounting between said first and second supporting walls, so that said flint is pressed downwardly by said circumferential coarse striking surface of said striking wheel, and that said flint is relatively pressed by said flint spring upwards to urge against said circumferential coarse striking surface of said striking wheel, said circumferential coarse striking surface having a width slightly larger than a diameter of said flint, wherein said striking wheel further comprises two circular discs integrally formed at said two sides of said striking wheel, each of said circular discs having a glossy circumferential surface and a width equal to each of said two gaps formed between said first and second supporting walls and said striking wheel; and

a U-shaped wind shield mounted on said first and second supporting walls to cover said gas nozzle and said first and second supporting walls, said wind shield having an all around vertical U-shaped side wall which has a round end portion and two wing portion extending from said round end portion, a top wall horizontally and inwardly extending from a top side of said round end portion of said U-shaped side wall and defining a cutout right above said gas nozzle, and a first and a second L-shaped bent-edge member which are respectively and perpendicularly bent from a top side and an end side of said wing portions, wherein said first and second bent-edge members are respectively extended from said top wall along said top side and said end side of each of said wing portions for fittedly and respectively resting on a horizontal top edge and a vertical rear edge of each of said first and second supporting walls, a top end corner of each of said wing portions forming a curved corner which has a curvature matching with at least a quarter of a circumference of said striking

wheel, so that said striking wheel is sidewardly covered by said two wing portions of said windshield, wherein said first and second bent-edge members of said wind shield are respectively and inwardly extended until abutting two sides of said striking wheel to form two protecting bent-edge members in order to cover two gaps formed between said striking wheel and said first and second supporting walls for better striking contact by increasing a contact area with a user's thumb.

2. A disposable lighter, as recited in claim 1, wherein each of said circular discs has a diameter equal to that of said striking wheel.

3. A disposable lighter, as recited in claim 1, wherein each of said circular disc has a diameter smaller than that of said striking wheel to form a supporting disc.

4. A disposable lighter, as recited in claim 1, wherein a radius of said striking wheel is equal to a radius of said curved corner of each of said wing portions of said wind shield.

5. A disposable lighter, as recited in claim 2, wherein a radius of said striking wheel is equal to a radius of said curved corner of each of said wing portions of said wind shield.

6. A disposable lighter, as recited in claim 3, wherein a radius of said striking wheel is equal to a radius of said curved corner of each of said wing portions of said wind shield.

7. A disposable lighter, as recited in claim 1, wherein a radius of said striking wheel is slightly smaller than a radius of said curved corner of each of said wing portions of said wind shield.

8. A disposable lighter, as recited in claim 2, wherein a radius of said striking wheel is slightly smaller than a radius of said curved corner of each of said wing portions of said wind shield.

9. A disposable lighter, as recited in claim 3, wherein a radius of said striking wheel is slightly smaller than a radius of said curved corner of each of said wing portions of said wind shield.

10. A disposable lighter, comprising:

a lighter body for receiving a liquefied fuel therein;

a mounting frame, which is sealedly affixed on top of said lighter body, comprising a first and a second supporting wall integrally, parallelly, vertically, and upwardly extended from two sides of said mounting frame, said mounting frame further having a vertical spring chamber between said first and second supporting walls;

a flint spring being received in said spring chamber;

a gas lever being pivotally mounted between said first and second supporting walls and having a central cutout to allow said spring penetrating therethrough to insert into said spring chamber, said gas lever further integrally providing a thumb pusher at one end thereof;

a gas valve with a gas nozzle extending upwards above said mounting frame being installed inside said mounting frame, said gas nozzle being engaged with another end of said gas lever, so that when said thumb pusher is pushed downwardly, said another end of said gas lever lifts said gas nozzle to release gas from an interior of said lighter body via said gas valve;

an ignition device comprising a flint and a striking wheel, wherein said flint is supported on top of said flint spring with a bottom portion thereof inserting into said spring chamber, said striking wheel which has a circumferential coarse striking surface being positioned right above said flint by rotatably mounting between said first and

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second supporting walls, so that said flint is pressed downwardly by said circumferential coarse striking surface of said striking wheel, and that said flint is relatively pressed by said flint spring upwards to urge against said circumferential coarse striking surface of said striking wheel, said circumferential coarse striking surface having a width slightly larger than a diameter of said flint, wherein said striking wheel further comprises two circular discs integrally formed at said two sides of said striking wheel, each of said circular discs having a glossy circumferential surface and a width equal to two gaps formed between said first and second supporting walls and said striking wheel, said circular discs each having a diameter equal to that of said striking wheel so as to fill said two gaps respectively; and

- a U-shaped wind shield mounted on said first and second supporting walls to cover said gas nozzle and said first and second supporting walls, said wind shield having an all around vertical U-shaped side wall which has a round end portion and two wing portion extending from said round end portion, a top wall horizontally and inwardly extending from a top side of said round end portion of said U-shaped side wall and defining a cutout

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right above said gas nozzle, and a first and a second L-shaped bent-edge member which are respectively and perpendicularly bent from a top side and an end side of said wing portions, wherein said first and second bent-edge members are respectively extended from said top wall along said top side and said end side of each of said wing portions for fittedly and respectively resting on a horizontal top edge and a vertical rear edge of each of said first and second supporting walls, a top end corner of each of said wing portions forming a curved corner which has a curvature matching with at least a quarter of a circumference of said striking wheel, so that said striking wheel is sidewardly covered by said two wing portions of said windshield.

11. A disposable lighter, as recited in claim 10, wherein a radius of said striking wheel is equal to a radius of said curved corner of each of said wing portions of said wind shield.

12. A disposable lighter, as recited in claim 10, wherein a radius of said striking wheel is slightly smaller than a radius of said curved corner of each of said wing portions of said wind shield.

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